# Preference Model For Selecting Insurance Service By Micro & Small Medium Entreprise (A preliminary Study)

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**Abstract**

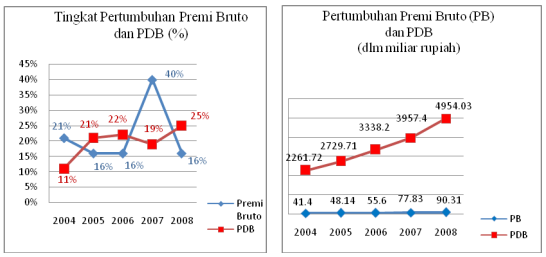
fuad@aamai.or.id This is a joint research between Indonesian Insurance Institute (AAMAI) and Gunadarma University (UG), with fully funded by the Indonesian Insurance Institute. This study generally aims to develop a model of needs and preferences of the Indonesia people toward the insurance, by applying psychographic model. It is expected that results of this research can be applied by the Indonesian Insurance Institute in making demographic patterns and determine appropriate methods for disseminating the importance of the insurance. This study analysis of more than 30 previous research (1966-2009) in the field of preferences and needs of insurance. The next stage is carried out to test the validity and reliability models. Validity and reliability test conducted on 300 respondent of SME in Jogjakarta. The results show that there are three main categories of insurance determinants have been identified for this purpose; economic, psychographic and social factors.

## 1 Background

Financial sector are expected to contribute towards national economic development is the insurance industry. In addition to the banking industry, insurance industry is expected to play a major role in improving development funds derived from public savings . The insurance industry has a dual role in the economy of a country. Its main role is to provide protection against the risks faced by society and the business world, thus supporting the stability and development as the courage to invest. Other roles, as a Non-Bank Financial Institutions (NBFI), namely raise public funds through the withdrawal of insurance premiums and provide premium reserve is for national economic development.

Study Ishmael (2007) showed that the rate of growth of insurance industry in ASEAN countries is significantly influenced by three factors. These three factors are (1) ratio of the policyholder with a population, (2) the development of gross premiums, and (3) fluctuations in exchange rates of USD. The first and second factor strongly associated with consumption patterns and consumer buying power (disposable income), as well as public awareness of the need for life insurance and level of confidence in the life insurance industry. As for general insurance, the factors that will affect its growth is economic growth in the real sector, as well as fluctuations in exchange rates of USD ($ U.S.).

Celuch, K., et al. (2004) stated that until end of 2008, insurance companies in developing countries managed to collect a premium of U.S. $ 209 billion or only 8.5 percent of total premiums around the world. Meanwhile, the OECD report in the same year showed that insurance companies around the world recorded the direct premiums of U.S. $ 2,444 billion, equivalent to 7.8 per cent of Gross Domestic Product (GDP) of the world [Arora, 2003]. According to the research Gunawan (2010) total gross premiums of the insurance industry in Indonesia has experienced significant growth by an average of 21.8% over five years (2004-2008). Based on Indonesian Insurance Report (DAI, 2008), total gross premiums of the insurance industry Indonesia at Rp. 90.31 trillion. Description of Increasing gross premiums and gross domestic product (204 – 2008) presented in Figure 1.




(a) Premium (b) GDP Growth

Figure 1: Premium & GDP Growth (2004 – 2008)

Indonesian Insurance Report (2008), showed that the rate of growth in gross insurance premiums in Indonesia in 2004 to 2008 has fluctuated: by 21% in 2004; in 2005 by 16%, in 2006 at 16.5%, year 2007 40%, and in 2008 was 16%. Although the average growth rate of gross premium in five years (2004-2008) increased by 21.8% per year. Increase in gross premiums was also accompanied by an increase in gross domestic product (GDP) which in 2004 worth about Rp2, 26 trillion to about Rp4, 95 trillion in 2008. While the average growth rate of gross domestic product (GDP) of Indonesia of 19.6% per year.

Analysis on the ratio of the gross domestic product and gross premiums will illustrate the level of penetration of the insurance industry. Penetration level of insurance industry illustrates the contribution of the insurance industry in Indonesia towards the achievement of the gross domestic product. Contributions are reflected through a comparison or ratio of gross premiums to gross domestic product . Penetration of the insurance industry tend to decline for 3 years (2004-2006); 1.83%, 1.76% and 1.67%, with an average of 1.75%. (Indonesian Insurance Report, 2008).

According the level of penetration of the insurance industry suggests a market opportunity insurance business in Indonesia is still big in the future, in line with industry growth in the national economy. As Respons to these opportunities, acknowledged there are still obstacles facing both internal and external. According Suhcyar (2003) there are some obstacles that are internal, in fact reflected in the still low level of professionalism of the actors in the insurance industry. Some studies show that the rank ordering of the needs of uninsured people in Indonesia still be in the order that is rated below, perhaps even at all has not been scheduled (Suchyar, 2003; Sunarto, et al., 2007; Ismael, 2007; and Gunawan, 2010). It can be concluded that people in Indonesia in general has not reached the level of insurance and insurance awareness and cultural consciousness mindedness strong saving in general is still low.

Gunawan (2010) suggested method that can be used to examine the importance of insurance programs in the community (population) is done through insurance density ratio.

In 2008 total gross premiums of the Indonesian insurance industry is Rp. 90311.72 billion, with a population of Indonesia for the year amounted to 228.52 million people, then that would be obtained insurance density of Rp395.202, 70. This value indicates that on average each of Indonesia's population in 2008 issued a fund amounting to Rp395.202, 70 to pay the insurance premiums (Indonesia Insurance Report, 2008).

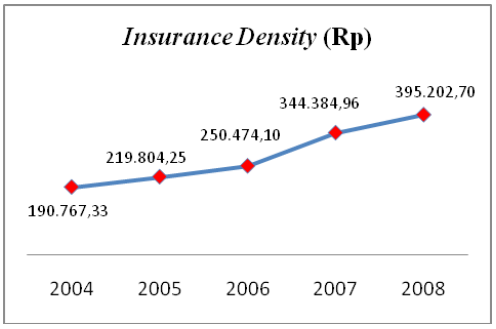



Figure 2: Insurance Density

Based on Sigma (No. 3/2009), insurance density for the life insurance sector amounted to USD 20.7 while for the non-life insurance and reinsurance of USD 9.7. Another fact that the ratio of gross premium to the gross domestic product (GDP against industrial penetration) for the life insurance sector is 0.92%, while for the non-life insurance and reinsurance are 0.43%.

Based on data and indicators of Indonesian Insurance in 2008, reports as well as previous research has been conducted, showing that the insurance density and penetration of the insurance industry is still very small when compared with banks (banking density), which raises the question whether the insurance industry can be said to contribute the maximum to the increase in gross domestic product, and then what are the factors that become obstacles or barriers in the insurance density is increasing. The next question that arises is what steps and how the methods of socialization that is necessary to increase the insurance density in Indonesia. This phenomenon is one of the motivations of this study.

Table 1: Penentration and Density

| Business | Insurance Penetration | Insurance Density |
|---|---|---|
| Life | 0.92 | 20.7 |
| Non-Life & Reinsurance | 0.43 | 9.7 |
| | Bank Penetration (Deposit as % GDP) | Bank Density (Deposit per Capita in USD) |
| Bank | 170% | $US 6900 |

According that phenomenon, purposes of this study are (1) To develop psychographic models that can map the demographics and preferences of the Indonesia people toward the insurance services. (2) To identify any factors that cause not yet known to the public insurance services.

## 2 Conceptual Framework

According to the permanent income hypothesis, the consumption pattern of consumers is expected to fluctuate over their lifetime, and income is expected to drop substantially during retirement. The consumer needs to both borrow from the future and to save money before retirement to provide for a stable level of consumption. The insurance benefit that the beneficiaries receive can be a very important financial resource. It can cover daily living expenses, pay the mortgage, or other outstanding debts.

[Yaari, 1965]stated that an individual increases expected utility by purchasing insurance. [Lewis, 1989] noted that insurance is chosen to maximize the beneficiaries' expected lifetime utility. But before households consider purchasing life insurance to increase their expected utility, they must make decisions on how much and what type of insurance they need. [Anderson and Nevin, 1975] stated that insurance purchasing behavior includes three parts (Figure 3). These three parts have been used as three dependent variables in previous studies.

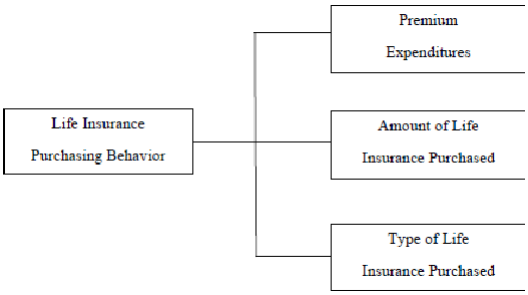



Figure 3: Insurance Purchasing Behavior

The other factors that determine the cost of insurance include the existence of a cash value, dividends, and the time value of money [Rejda, 2004]. Therefore, useful and adequate cost information is a critical element to intelligent decision-making.

After the needed amount of insurance has been determined, there is a question about the most suitable type of insurance for the insured. "The best policy is the one that best meets your financial needs." [Rejda, 2004] stated.Additionally, the individual's situation will have an effect on the choice of the type of insurance. Factors such as age, marital status, education, the ability to pay the premium, risk tolerance, and so forth, all play a role in this decision.

However, on a single country-by-country basis, [ward, 2000] have shown that differences in the causal relationship between insurance market development and economic growth are apparent. Research efforts have, therefore, moved on to understanding the factors that encourage the development of financial institutions. By identifying the determinants that encourage insurance demand, policymakers are able to aid financial development, thereby positively influencing economic growth.

Many studies, however, have considered only one type of life insurance or combined these two types as one entity. Focus of this study to elaborate and analysis overall research that influence insurance demand, also developing insurance need and preference model. Detail description overall research framework are shown in Figure 4.

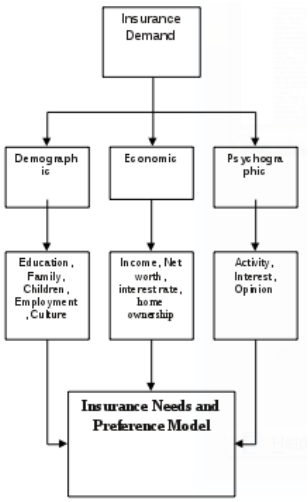



Figure 4: Conceptual Framework

## 3 Research Method

This research is preliminary research that aims to develop and build research model of consumers' segmentation and psychographic on insurance industry in Indonesia. In addition, this research also reviews and analyses previous studies, evaluates main model significance and tests validity and reliability of research instrument.

In the insurance industry, respondents are divided into two groups, namely (1) respondents who have certificate of insurance expertise as well as members of insurance expertise associations (2) respondents who work in insurance industry yet do not have certificate of insurance expertise. For public respondents, they are divided into several groups based on (1) level of education, (2) occupation, (3) people from industry, (4) people from SMEs, and (5) Public.

Pinsonneault and Kreamer (1993) stated that studies in social field related to behavior have main factor, namely factor in determining research proce-

dure and stages. In detail, the research procedure is presented in figure 5.

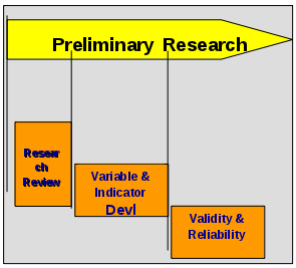



Figure 5: Research Procedure

Research stages include (1) development of questionnaire materials by analyzing previous related researches, (2) indicator analysis and development, and (3) analysis of validity and reliability of questionnaire materials.

# 4 Result

Preliminary study was conducted to examine and analyze the research model that has been formed. Tests conducted to elaborate on the validity and reliability of the model and questionnaire. Tests carried out on one of the previously determined segmentation, and the research team has decided to elaborate in small medium enterprise (SMEs) area. Indonesian SMEs have an important role related to the government efforts in order to reduce unemployment, fight against the poverty, and distribute income.

The awareness to elaborate SMEs is based on three conditions. First, SMEs employ many labors. The preference of receiving many labors makes SMEs intensive in using local natural resources. Second, SMEs will give positive impact toward the increasing labors, reducing poverty, distributing the income, and developing the economy in rural. Third, SMEs also aim at the survival strategy in monetary crisis.

SMEs sector is working hard in facing long term crises. The contribution of this sector in national economy is significant enough. In 2005, the number of SMEs registered 44.6 billion units or 99.99% from the total of economic business unit and received 88.7% labor from the total of Indonesian labors or almost 68.28 billion people.1 This data indicates that SMEs will become a motivator to the development of national economy, even if the productivity rates are still low.

The decision was also taken by the team is the selection of research areas. All team agree to establish in Province of Jogjakarta, because regionally, the majority of SMEs in all sectors is concentrated in Java, particulary in Province of Jogjakarta. SMEs have critical playing is an important engine for the development of local economies and communities (Tambunan, 2009). Total SMEs in Province of Jogjakarta has listed 43.224.007 unit (Tambunan, 2009).

Preliminary research that conducted in Province of Jogjakarta, involve 300 respondents. Of 300 copies of questionnaires distributed to three segments of business groups, namely micro, small and medium, 208 were returned and collected (response rate 69,3%). Of the 208 questionnaires collected, 61% are micro business, 8% small business, and 31% are medium business. In terms of gender, 41% are women and 59% are men (Figure 6)

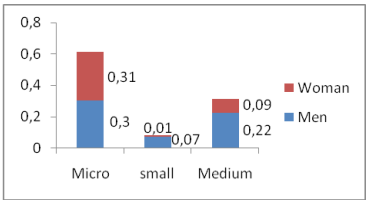



Figure 6: Gender Composition

The questionnaires are divided into four parts, namely Part A, Part B and Part C. Part A describes respondent demography; Part B describes of business profiles respondents; Part C describes factors considered in deciding weather or not to joint individual insurance; Part D describes factors considered in deciding weather or not to joint insurance for employer.

The number of respondents who did not answer the question A1, A5, A8 and A11, with ranges under 20%, while other questions in Part A have been answered with the range more than 96% (Figure 7.). Questions of part B which consists of 10 questions, ratio of the number of respondents who answered is above 79%. The questions of part C, have achive lowest ratio is on question C2, are 19%. The questions of part D, have achive lowest ratio is on question D2 (6,4%) and D3 (5,5%).

The results of analysis in data collection in the field showed that the pattern of data collection for the questions in part A (A1, A5, A8, and A11), part C (C2), and part D (D2 and D3), should be considered in more depth.

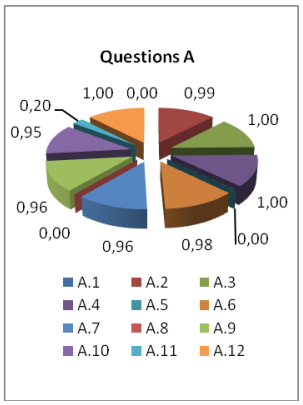



Figure 7: Validity Part A

This condition concerning two reasons (1) a will-

ingness to answer questions, (2) relates to the ability of respondents in understanding questions (presumably related to the educational level of respondents). Another results show that when viewed from group of respondents, then it is in the micro business group that data search process should be conducted attentively (in-depth interview).

# 5 Models And Emperical Study

The theoretical and empirical research to date has suggested that, on average, an overwhelming positive relationship between financial development and economic growth is evident and that a well-developed financial sector contributes to economic growth. However, on a single country-by-country basis, Ward and Zurbruegg (2000) have shown that differences in the causal relationship between insurance market development and economic growth are apparent. Research efforts have, therefore, moved on to understanding the factors that encourage the development of financial institutions. By identifying the determinants that encourage insurance demand, policymakers are able to aid financial development, thereby positively influencing economic growth. These determinants that have been empirically tested can be grouped under three broad subheadings; economic, political / legal, and social factors. To further explore exactly how these factors influence insurance demand, they are each considered in turn below.

In previous empirical studies, the amount of insurance demands is viewed as a function of numerous variables. These variables, explored through a variety of different approaches and data, explained the significant factors that influence the insurance purchase decisions. However, previous studies have provided some conflicting results. Most research on insurance demand determinants is based on empirical data. The demographic, economic and psychographic factors found to be the most robust in predicting life insurance demand will be the focus of this review. Some key findings of selected empirical studies period 1968 – 2005.

Chui and Kwok (2008 and 2009) did not include in their analyses the fifth (and last) cultural dimension introduced in a later stage by Hofstede (2001). Chui and Kwok (2009) study conceptually related to Hofstede's long-term orientation, use three main factors, as: demographic factors, economic factors and psychographic factors. By referring to all research suggestions from empirical study that have been elaborated, then variables that are going to be discuss in this research are demographic factors, economic factors and psychographic factors.

Insurance can also be seen as a product that is valued subjectively by its consumer. In fact Hofstede (1995) points out that the level of insurance within an economy depends on the national culture and the willingness of individuals to use insurance as a means of dealing with risk. It is not surprising that show that the demand for insurance in a country may be affected by the demographic factors (unique culture). Park and Lemaire (2009) suggest that the main demographic factors are age, education, family size and number of children, employment, and others demography factor (marital status and culture).

Indeed, early findings highlighted that the demand for life insurance is positively correlated with income, see [Yaari, 1965, Fortune, 1973, Lewis, 1989] . These results are also confirmed by the more recent cross-country based studies of Beenstock et al. (1986), Truett and Truett (1990), and Browne and Kim (1993). Ward and Zurbruegg (2002) also extend these findings further by comparing modern. Hussels et all (2003) study has promote recommendation there are four important thing for economic factors, are: income, net worth or wealth, rate of interest and inflation, home ownership.

Insurance can also be seen as a product that is valued subjectively by its consumer. In fact Hofstede (1995) points out that the level of insurance within an economy depends on the national culture and the willingness of individuals to use insurance as a means of dealing with risk. It is not surprising that Douglas and Wildavsky (1982) show that the demand for life insurance in a country may be affected by the unique culture of the country to the extent that culture affects the degree of risk aversion. However, in the case of property casualty insurance Esho et al. (2002) highlight that the demand for insurance is in the main unaffected by cultural factors. This is in line with Park et al. (2002), who fails to identify that national culture has a significant impact on insurance pervasiveness in any specific country.

# 6 Summary and Conclusion

The relationship of variables to specific insurance products is limited. Term and cash value life insurance are two major types of life insurance. Previous studies do not produce a comprehensive picture of insurance demand by household in respect to the ownership and the amount owned. Three categories of insurance determinants have been identified for this purpose; economic, psychographic and social factors. In the future more attention should also be placed on the supply side of insurance industries, by analyzing and identifying factors that cause different degrees of cost and profit efficiencies across countries.

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